Title (en)

METHOD AND APPARATUS FOR PRODUCING BONDED DIELECTRIC SEPARATION WAFER

Title (de)

VERFAHREN UND VORRICHTUNG ZUM HERSTELLEN EINES GEBONDETEN DIELEKTRISCHEN TRENNUNGSWAFERS

Title (fr)

PROCEDE ET DISPOSITIF PERMETTANT LA PRODUCTION D'UNE TRANCHE DE SEPARATION DIELECTRIQUE COLLEE

Publication

EP 1278245 B1 20100303 (EN)

Application

EP 01908349 A 20010305

Priority

- JP 0101728 W 20010305
- JP 2000130790 A 20000428

Abstract (en)

[origin: EP1278245A1] The present invention provides a method for producing a bonded dielectric separation wafer in which an auto-alignment can be carried out with reference to the orientation flat of a supporting substrate wafer after the wafer bonding step, and also an apparatus to be used for bonding wafers. When wafers are placed one upon another, the silicon wafers 10, 20 are irradiated with transmission light in order to capture the transmission images thereof. The positions of the pattern of dielectric isolation grooves 13 in the silicon wafer 10 and the orientation flat 20a of the silicon wafer 20 are determined from the images and the bonding position of the wafers 10, 20 is determined based on the determined positions. Auto-alignment of the bonded dielectric separation wafer can thereby be carried out with reference to the orientation flat 20a of the silicon wafer 20 after the wafer bonding step. <IMAGE>

IPC 8 full level

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CPC (source: EP US)

H01L 21/681 (2013.01 - EP US); H01L 21/76256 (2013.01 - EP US); H01L 21/76264 (2013.01 - EP US); Y10S 438/977 (2013.01 - EP US)

Cited by

WO2016193296A1; US9111982B2; US9601324B2; EP1564804A1; AT500075A3; AT500075B1; EP2299472A1; DE102012107899A1; DE102012107899B4; CN105244305A; WO2011042093A1; US7767549B2; US8500930B2; US8875766B2; US10204812B2; US7598152B2; US7998833B2; US9576825B2; US10388545B2; US11361980B2; US12027383B2; US10325798B2; US10886156B2; US11355374B2; US11756818B2

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